IN THE UNITED STATES DISTRICT COURT FOR THE NOTHERN DISTRICT OF GEORGIA ATLANTA DIVISION

| DONNA CURLING, et al., |) | |
|------------------------|---|------------------|
| Plaintiffs, |) | Civil Action No. |
| | , | |
| |) | 1:17-cv-02989-AT |
| v. |) | |
| |) | |
| BRIAN KEMP, et al., |) | |
| |) | |
| Defendants. | | |

DECLARATION OF CANDICE HOKE IN SUPPORT OF MOTIONS FOR PRELIMINARY INJUNCTION

I, CANDICE HOKE, hereby declare as follows:

1. I hold a J.D. from Yale Law School and a Master's of Science in Information Security Policy and Management from Carnegie Mellon University. I am currently the Founding Co-Director of the Center for Cybersecurity & Privacy Protection and Professor of Law, Emerita, at Cleveland State University, Cleveland, Ohio. I have professional experience assisting another jurisdiction – Cuyahoga County, Ohio – in achieving its transition from direct recording electronic (DRE) voting machines to paper ballots read by optical scanners, in a time frame similar to the time available before the November 2018 general election in Georgia. I make this declaration of my own personal knowledge, and I am competent to testify to the matters set forth herein.

- 2. In 2005, I founded the nonpartisan Center for Election Integrity at Cleveland State University to facilitate managerial delivery of fair public election processes.
- 3. In 2006, after Cuyahoga County, Ohio (one of the largest election jurisdictions in the nation) launched and had difficulties implementing an e-voting system, the Cuyahoga County Board of Elections and the County Commission jointly appointed me to a 3-person investigatory panel to ascertain the causes and cures for the managerial and technical failures of that launch. I was the major author of the Final Report that included over 300 action recommendations for improving the election management process, including of its electronic voting systems.
- 4. The Cuyahoga County Board of Elections and the County Commission subsequently formally appointed the Center for Election Integrity to serve as Public Monitor of Cuyahoga Election Reform, and I directed that effort to restore public trust by transparently identifying election problems (such as inconsistency between the number of voters signing in to cast ballots and the number of ballots counted), the internal action efforts to correct and prevent future errors, and their relative success. At times similar to a special master role, we worked closely with election departmental and executive managers to suggest methods for improving or assuring their overall administrative and technological success.

- 5. In Ohio, I have also served within the election system as a supervising poll worker; as a "roving" election technology trouble-shooter for many voting locations; as a voter registration problem-solver; and as a consultant to the Ohio Secretary of State's office on election management and improvement, including on voting technology issues. A more extensive overview of my credentials pertaining to election management and technologies is attached as an Addendum.
- 6. On December 21, 2007, while I was serving as Public Monitor of Cuyahoga County Election Reform, Ohio's Secretary of State Jennifer Brunner broke a 2-2 tie of the Cuyahoga County Board of Elections and directed Cuyahoga County to transition from DRE touchscreen voting machines to the use of an optical scanning voting system with paper ballots before the March 4, 2008 primary election.
- 7. I initially publicly opposed the transition from touchscreen DRE voting machines to optical scanning machines with paper ballots before the March 2008 primary, because I believed that there was insufficient time (given the holidays, almost exactly two months) to make that transition successfully. I was wrong.
- 8. Following the direction from the Secretary of State, Cuyahoga County successfully transitioned to the use of optical scanning voting machines before the March 4, 2008 primary election. The County was able to lease optical scanning

equipment from a vendor and produce all the necessary paper ballots before the election. Voters in Cuyahoga County, Ohio's most populous county, successfully voted in that primary using paper ballots.

- Transitioning from DRE voting machines to paper ballots with optical 9. scanners in Georgia for the upcoming 2018 election should be less complex and even more feasible to achieve than the successful transition that I monitored in Cuyahoga County, for multiple reasons. First, while Cuyahoga County successfully transitioned to optical scanners shortly before a primary election, the upcoming general election will require fewer ballot styles than would be required in a primary election. Second, while Cuyahoga County transitioned to new equipment in 2008, County and State election officials in Georgia already have substantial experience and know-how with the Diebold optical scanners that are already available to be used, because these machines are already used in every county for absentee and provisional ballots. Third, ballot printing companies remain available to receive large orders, even for the early voting period. In private communications, one major ballot printer assured me that his company can still receive an order to print 3 million ballots and provide them to Georgia's election jurisdictions in a timely manner.
- 10. Based on my experience in Cuyahoga County, and my expertise developed over years of work in the field of election management and technologies,

in my opinion there remains more than sufficient time for Georgia to transition from DRE voting machines to the use of paper ballots with optical scanning machines for the upcoming 2018 general election.

I declare under penalty of perjury that the foregoing is true and correct.

Executed this 13th day of September 2018.

Canded Alle

Candice Hoke

(Addendum follows)

Addendum:

Summary of Relevant Credentials of Declarant Candice Hoke

- Founding Director of the *Center for Election Integrity* and Project Director of the *Public Monitor of Cuyahoga Election Reform* (2006–08). Previously, Cybersecurity Engineer on the *Cyber Risk & Resilience Team*, CERT/Software Engineering Institute. Currently the Founding Co-Director of the *Center for Cybersecurity & Privacy Protection*, Cleveland, Ohio.
- Has advised Federal officials on deployed voting systems' vulnerabilities and the omission of effective security designs, testing, election offices' security infrastructure and tech management, and on the threats (and questionable legality) presented by Internet voting, within the U.S. Departments of Homeland Security, Defense, Justice, and the Executive Office of the President (from 2008 forward).
- Testified before Congress on the need for post-election auditing (U.S. House of Representatives, Committee on Administration); before the U.S. Election Assistance Commission on the need for comprehensive voting system cyber "incident reporting"; before the Ohio General Assembly on the vulnerabilities of Ohio's voting systems, and before numerous other public bodies at State and local levels.
- Has worked closely with congressional offices of both major parties and major national nonprofit organizations in drafting and critiquing proposed legislation to improve election technologies' security.
- Research Team Leader within the definitive scientific study of deployed voting systems for the California Secretary of State California, specifically on aspects of Diebold systems; published as *Top to Bottom Review of Voting Systems* (2007).
- Consultant for structuring the Ohio EVEREST scientific study (2007) of Ohio's deployed voting systems, and educator on election law and processes for security assessments.
- As Director of the Public Monitor of Cuyahoga Election Reform, led technical teams in nationally
 unprecedented cyber risk assessments of election technical security, authored public reports
 on the security deficiencies warranting correction; proposed and led Ohio's first post-election
 audit of cast ballots; facilitated improved managerial and technical processes that included
 poll worker recruitment and training.
- Served as the voting technology expert for 3 terms on the American Bar Association's Standing Committee on Election Law, Advisory Commission, and was one of only 2 academics appointed to the Ohio Attorney General's first Cybersecurity Advisory Board. Currently serves on Verified Voting's Advisory Board.
- After the 2 largest voting system vendors merged, leading to 1 corporation controlling over 72% of Americans' votes, led the national nonprofit and election officials' coalition that successfully worked with the U.S. Department of Justice Antitrust Division to compel divestment of the merger.
- Author or co-author of numerous published articles and reports on election technologies and other election administration issues, including an election tech forensics guide.

- Was a Professor of Law, Cleveland State University for over two decades (until Aug. 2017), and is currently Professor of Law, Emerita, working as a cybersecurity consultant, educator, and advocate.
- Broadcast media experience includes all major US television networks plus local TV and radio in 9 major media markets, national and local NPR interviews; U.S. newspapers/print media include AP, NY Times, Los Angeles Times, and the Washington Post.
- Education: J.D., Yale Law School (*Yale Law Journal*); M.S. in Information Security Policy & Management, Carnegie Mellon University.